Aditya Sen

UG (IV Year I Semester)
B.Tech. (Metallurgical & Materials Engineering)
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Registration No: 20118004/2024

Indian Institute of Technology Roorkee

VERIFIED

Area of Interest

Problem-Solving, Data Analysis & Interpretation

Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2023	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	8.517
2019	Intermediate (Class XII)	G R Global Academy (CBSE), Jaipur Raj	86.40 %
2017	Matriculate (Class X)	G R Global Academy (CBSE), Jaipur Raj	9.800

Internships

Machine Learning Engineer | iNeuron.ai   May 2023 - July 2023

- Use Bitcoin transaction dataset to predict money laundering.
- Convert CSV data into data-set using pandas, apply data preprocessing and predicitive data modelling.
- Use Logistic Regression, Random Forest & XGBoost ML algorithm to predict illicit transactions and compare accuracy.

Projects

Autonomous Underwater Vehicle | ASME, IIT Roorkee Chapter   October 2021 - April 2022

- Designed AUV for deep-sea navigation & exploration.
- Programmed the Arduino for 5 DOF and control gripper. Also, implement PID for stable & accurate movement.
- Leverage the Arduino and ROS with PySerial library for serial communication.

Applied Data Science Lab | Worldquant University   December 2022 - May 2023

- Worked on real-world projects accessing data from files, SQL & NoSQL databases then cleaned & preprocessed data for data-set.
- Created functions and ETL pipelines to prepare training data and built Machine Learning models for Supervised and Unsupervised learning tasks.
- Housing in Mexico, Apartment Sales, Earthquake Damage, Bankruptcy & Customer Segmentation.

Pick and Place Robot | ASME, IIT Roorkee Chapter   July 2021 - August 2021

- Robot is designed to navigate through the grid area, pick the balls and sort them based on their color.
- Programmed the Arduino microcontroller for controlling IR sensor & actuators and execute the whole algorithm.
- Leverage the Arduino and python libraries to establish serial communication between python and Arduino to get the result of the vision control block of the robot.

Awards / Scholarships / Academic Achievements

- Third runner up in 9th All India UCMAS Abacus, Mental Arithmetic Competition held in 2009.
- Selected Delegate for Havard Project for Asian and International Relations 2023 (HPAIR)
- Level 2 Qualified in International Quant Championship, among top 20% globally
- Earned Gold, Silver and Bronze in World Quant Brain
- 294th rank globally in August Coderush, Newton School

Skills

Computer languages   C++, Python, SQL
Software Packages   VS Code, Github, MySQL, JupyterNotebook, Tableau, PowerBI, Excel / Spreadsheet

Positions of Responsibility & Extra Curriculars

Technical Head | ASME IIT Roorkee Chapter   May 2022 - July 2023

- American Society of Mechanical Engineers (ASME) is technical club that organizes workshops and other technical events & competitions.
- Joined group as a technical member and worked in the team on various innovative projects such as Autonomous Underwater Vehicle, Pick & Place Robot; also participated in several competitions, ASME E-Fest, SAUVC, and Flipkart Grid.
- Promoted as Technical Head in Electronics.

Event Co-ordinator | Workshop on Microcontrollers & Sensors   February 2022

- Conducted workshop about microcontrollers, sensors & actuators, discussed their functioning and application.
- Demonstrate actuators and sensors controlled by a microcontroller and implement their use in a robotic project.

Competitive Programming | Online Judges   January 2022 - Present

- An active member on various online judges including Codeforces, Codechef, Leetcode, and InterviewBit.
- Specialist over Codeforces (rating: 1514-max)
- Solved over 500 problems over Leetcode, and 300 problems over InterviewBit.